



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,525	03/31/2004	Tushar Kanti Chakraborty	KUMA.P0111US	6907

7590 03/02/2007  
Joseph J. Crimaldi  
Renner, Otto, Boisselle & Sklar, LLP  
Nineteenth Floor  
1621 Euclid Avenue  
Cleveland, OH 44115-2191

EXAMINER
----------

SOLOLA, TAOFIQ A

ART UNIT	PAPER NUMBER
----------	--------------

1625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/02/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/814,525

**Applicant(s)**

CHAKRABORTY ET AL.

**Examiner**

Taofiq A. Solola

**Art Unit**

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 31-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-3, 6, 7, 10, 11, 14, 15 and 26-30 is/are rejected.
- 7) ☐ Claim(s) 4, 5, 8, 9, 12, 13 and 16-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1625

Claims 1-47 are pending in this application.

Claims 1-30 (in part), 31-47 are drawn to non-elected subject matter.

***Response to Restriction***

The election of group IV with traverse in the Paper filed 1/22/07 is hereby acknowledged. The traversal is on the basis that it would not be undue burden on the Examiner to search "groups IV-XII, possibly groups I-XII." While applicant's argument is found persuasive with respect to groups IV-XII, it is not persuasive with respect to groups I-III, because the Examiner must search all classes and subclasses of all the inventions and such would constitute undue burden. Therefore, the restrictions between groups IV-XII are withdrawn, and the restrictions between groups I-III are also withdrawn. Since applicant elects group IV for examination, the new group IV-XII is being examined in this Office action.

The restriction between the two new groups, I-III and IV-XII, is deemed proper and therefore made FINAL.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 26-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 1625

The term "others" and phrase "all other amino acid side chains", are not defined in the specification so as to ascertain the structures of compounds included and/or excluded by the term and phrase. Therefore, the claims lack adequate support in the specification. By adding the definition the rejection would be overcome. However, adding the definition may raise the issue of new matter rejection.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 26-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "others" in every occurrence, and phrase "all other amino acid side chains", claim 1, are not defined in the claims so as to ascertain the metes and bounds of the claims. Therefore, the claims are indefinite.

Claims 26-29 improperly depend from claim 1. The claims are drawn to a process of making while claim 1 is drawn to a compound. The claims are omnibus claims, confusing and are therefore indefinite.

Claim 30 is confusing. It is not clear if the claim is drawn to a product-by-process or compounds. It fails to clearly set forth what is reacted with "FmocOSu in dioxane water". It is an omnibus claim.

By deleting claims 26-30 the rejections would be overcome.

Art Unit: 1625

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-7, 10-11, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prasad et al., US 2005032707.

Claims 1-2, 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chakraborty et al., Tetrahed. Lett., (2002), Vol 43(7), pages 1317-1320.

Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wells et al., WO 9411398; Hodohara et al., Nippon Kessen Shiketsu Gakkaishi (1992), Vol 3(3), pages 163-8; individually.

Applicant claims compounds of formula 1, wherein R is selected from H, Boc, amine and others; R1 is OH, -O-alkyl, amine, or others and R2 is alkyl.

*Determination of the scope and content of the prior art (MPEP §2141.01)*

Prasad et al., et al., teach compounds of formula 1, compounds of formula 1, wherein R is selected from H or Boc; R1 is OH or -O-alkyl and R2 is H. See the marked compounds on the attached abstract.

Chakraborty et al., teach compounds of formula 1, wherein R is selected from H or Boc; R1 is -O-alkyl and R2 is H. See the marked compounds on the attached abstract.

Wells et al., teach compounds of formula 1, wherein R is selected from H, Boc, amine or others; R1 is OH, -O-alkyl, amine, or others and R2 is H. See the marked compounds on the attached abstract.

Art Unit: 1625

Hodohara et al., teach compounds of formula 1, wherein R is H; R1 is amine or others and R2 is H. See the marked compounds on the attached abstract.

*Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)*

The difference between the instant invention and that of the prior art is that applicant claims alkyl at position R2 while the prior arts teach H at the position.

*Finding of prima facie obviousness---rational and motivation (MPEP §2142.2413)*

However, H and alkyl are art recognized equivalents. *In re Lincoln*, 53 USPQ 40 (CCPA, 1942); *In re Druey*, 319 F.2d 237, 138 USPQ 39 (CCPA, 1963); *In re Lohr*, 317 F.2d 388, 137 USPQ 548 (CCPA, 1963); *In re Hoehsema*, 399 F.2d 269, 158 USPQ 598 (CCPA, 1968); *In re Wood*, 582 F.2d 638, 199 USPQ 137 (CCPA, 1978); *In re Hoke*, 560 F.2d 436, 195 USPQ 148 (CCPA, 1977); *Ex parte Fauque*, 121 USPQ 425 (POBA, 1954); *Ex parte Henkel*, 130 USPQ 474, (POBA, 1960).

Therefore, the instant invention is prima facie obvious from the teachings of the prior arts. One of ordinary skill in the art would have known to replace H with alkyl at the time the instant invention was made. The motivation is from the knowing that H and alkyl are equivalents.

***Allowable Subject Matter***

Claims 4-5, 8-9, 12-13, 16-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1625

***Telephone Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas McKenzie, can be reached on (571) 272-0670. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.



**TAOFIQ SOLOLA**  
**PRIMARY EXAMINER**

Group 1625

February 16, 2007